MINING ENGINEERING INDEX TO VOLUME 46

January-December 1994

PART 1

Feature Articles, Technical Papers, Industry Newswatch, News Briefs, Technology News, Washington Survey, President's Page and The Drift of Things

* Denotes feature article or technical paper

A

AIME, seeks to pair professionals with educators. Apr, 279
Alabama, exploration review.* May, 407
Alaska:
a base for mining projects in Russia. Jan, 19
Amax Gold to build Fort Knox Mine. Jun, 497
exploration review.* May, 407
to open more land to mining. Jan, 22
USMX evaluates Illinois Creek gold property. Oct, 1136
Alcoa, combines alumina operations with Western Mining. Aug, 929
Alluvial Mining & Shaft Sinking, prospecting coast of Africa. Feb, 108
Aluminum:
Alcoa, Western Mining combine operations. Aug, 929
fundamentals improve. Nov, 1210
industrial minerals review.* Jun, 523
six producing countries to limit production. Mar, 194
Amax Gold:
ready to build Fort Knox mine. Jun, 497
releases assay results from Alaskan property. Jan, 22
sells True North property to La Teko. Mar, 194
AMC:
announces Sentinels of Safety winners. Sep, 1042
asks that Bureau cuts be reconsidered. Apr, 262
challenges single-shift coal sampling. Aug, 922
has suggestions for Superfund. Aug, 922
merges with NCA. Nov, 1212
*American Barrick, a company profile:** L. White, S. Kral. Nov, 1231
American Barrick:
company profile.* Nov, 1231
engineering geology at Goldstrike.* Jan, 29
Goldstrike sends company to top of producers.* Nov, 1232
high tech tools help at Mercur. Jan, 24
Meikle will add high-grade ore to Goldstrike.* Nov, 1237
outlines global development plans. Dec, 1319
poised for future growth.* Nov, 1233
Andrews, P.R.A.: *Beneficiation of Canadian refractory magnesium minerals - magnesite, brucite and dolomite.** Mar, 234
*Animation models of mines to assist in mine planning and production:** J.R. Sturgul. Apr, 350
Arbiter, N.: *Copper hydrometallurgy - evolution and milestones.** Feb, 118
Arco Coal, wins bid for Colorado tracts. Feb, 110
*Are big gains in coal loading possible? A look at some fundamentals:** J.W. Leonard, III, A. Pradakar, J.G. Groppo. Jan, 65
Argentina:
Cambior invests in copper project. Nov, 1219
Crown considers buying seven properties. Mar, 194
lithium brines. Jul, 660
Arizona:
Asarco develops new deposit at Mission. Nov, 1227
commissioning Asarco's Ray expansion.* Jul, 637
copper mining adds $5.68 billion to economy. Jul, 614
exploration review.* May, 408
geology of the Yarnell gold deposit.* Sep, 1061
Phelps Dodge begins Morenci expansion. Jul, 620
radio remote control mining at Sierrita.* Jun, 503
Armstrong, R., speaks at SME Annual Meeting.* Apr, 323
Arnold, B.J.: *Coal blending - meeting specifications.** Oct, 1144
Asarco:
commissioning Ray expansion.* Jul, 637
develops new deposit at Mission. Nov, 1227
forms silver company with Coeur d'Alene. Nov, 1217
sold Asarco Australia to J.B. Were & Son. Mar, 194
sold Hillsboro zinc plant to US Zinc. Apr, 282
wins bid to develop Russian gold property. Oct, 1132
Atkinson, G.B.: *Electrowinning of gold and silver from copper-bearing cyanide solutions.** Jun, 568
Atkinson, L.C.: *Use of an analytical solution for preliminary estimates of ground water inflow to a pit.** Feb, 149
Atlas Copco:
compact drill rig for narrow veins. Feb, 106
opens regional TBM application center in Hong Kong. Apr, 284
Atlas Corp., explores Nevada properties. Dec, 1324
Australia:
MIM buys portion of Cannington project. May, 402
Peabody adds to coal holdings. Apr, 278
*Automating surface mines:** J.W. White, L.T. Zoschke. Jun, 510
Awards:
OSM announces winners. Aug, 933
Peabody wins Kentucky conservation award. Oct, 1131
Sentinels of Safety winners announced. Sep, 1042
Azco Mining:
enters offtake agreement with AIOC. Jul, 633
permits received for Sanchez property. Oct, 1135
Azrag, E.A.: *Use of an analytical solution for preliminary estimates of ground water inflow to a pit.** Feb, 149

B

Babbitt, B., wants to establish National Biological Survey. Jan, 5
Barite, industrial minerals review.* Jun, 523
Barratt, D.J.: *Variable speed SAG mills: Motor capability vs. mill capability.** Nov, 1273
*Barrick poised for future growth:** L. White. Nov, 1233
Basham, G.V.: *Environmental audits: A shield, a sword or a Trojan horse?** Mar, 230
*Basics of paste backfill systems:** F.W. Brackebusch. Oct, 1175
Baur, E.E.: *High-energy hydraulic hammer ratings.** Jul, 656
Bauxite, industrial minerals review.* Jun, 523
Bechtel, to market Corex technology. Jan, 22
Belt haulage vehicles aid coal dump reclamation:* Jul, 654
*Beneficiation of Canadian refractory magnesium minerals -magnesite, brucite and dolomite:** P.R.A. Andrews. Mar, 234
Beneficiation, Canadian refractory magnesium minerals.* Mar, 234
*Benefits of a good quality assurance program to an electric utility:** W.J. Mahoney. Oct, 1141
Bhappu, R.B.: *Economic potential of the Malanjkhand Proterozoic porphyry copper deposit, M.P. India.** Mar, 221
Bhaskar, R.: *Some observations on turbulet deposition rates of coal dust in mine airways.** Jan, 59
BHP Minerals:
builds platinum mine. Nov, 1227
drills Tanzanian nickel-cobalt property. Apr, 284
plans third Escondida expansion. Oct, 1124
plans Zimbabwe platinum project. Mar, 189
sells MIM portion of Cannington project. May, 402
Bingham, N.: *Mining's image - what does the public really think.** Mar, 200
Biooxidation, Newmont commercializes gold process. Apr, 273
*Bismark: Mexico's new major zinc mine:** J.C. Haptonstall. Apr, 295
Black Lung, reauthorization will severely impact coal industry. Oct, 1126
Blasting:
computers in explosives industry.* Jun, 505
determining the size distribution for blasted benches.* Nov, 1281
surface blasting near transmission lines.* Dec, 1357
Boron, industrial minerals review.* Jul, 661
Bourne, H.L.: *What it's worth: A review of mineral royalty information.** Jul, 641
Brackebusch, F.W.: *Basics of paste backfill systems.** Oct, 1175
Brazil, nickel property to be studied. Apr, 284
Breitenbach, A.J.: *Heap leach pad liner systems in North America.** Jan, 46
Breza, H.M.: *Recovery improvements extend reserves at Texasgulf's Aurora Mine.** Dec, 1333
British Columbia, Taseko gains 100% of Fish Lake. Feb, 106
Brownhill, J.E.: *Reconstruction of the Port Inland limestone operation.** Oct, 1149
*Bulk flotation of low-grade refractory ores at Homestake's McLauglin Mine:** D. Shuck, B. Olson, R. Smith. Dec, 1343
Bullock, R.L.: *Underground hard rock mechanical mining.** Nov, 1254
Bureau of Mines:
AMC asks that cuts be reconsidered. Apr, 262
budget cut by $18.7 million. Mar, 190
develops radial-axial splitter. Dec, 1319
faces 10% budget cuts in 1995. Sep, 1024
four interviewed for top job. Apr, 264
new technology for longwall ground control. Jul, 622
peat moss and polymer beads help clean metals from water. Oct, 1124
redirection of focus proposed. Feb, 96
researches stope leaching. Nov, 1216
Rhea Graham named director. Oct, 1126
testing vegetable oil as underground fuel. Mar, 176
threatened with budget cuts. Feb, 94
urges not to close Denver center. Feb, 108
Burlington Northern:
haulage challenges in the Powder River Basin.* Aug, 965
plans merger with Santa Fe Pacific Corp.

Aug, 936

C

California Desert Protection:
Congress passes measure. Nov, 1212
House passes its version. Sep, 1024
California:
Canyon Resources gets feasiblity OK for Briggs. Jun, 496
Congress passes Desert Protection Act. Nov, 1212
House passes Desert Protection Act. Sep, 1024
miners acquited of toxic waste dumping. Jun, 488
Cambior:
Canadian company grows and diversifies.* Nov, 1244
invests in Argentinian copper. Nov, 1219
Cambior: Growth and diversification for a Canadian gold producer: T. O'Neil. Nov, 1244
Camm, T.W.: *Simplified cost models for prefeasibility mineral evaluations.* Jun, 559
Canada:
beneficiation of Canadian refractory magnesium minerals:* Mar, 234
Cambior grows and diversifies.* Nov, 1244
El Condor merges with Pegasus. Apr, 275
Homestake plans underground mine at Eskay Creek. Apr, 277
Sudbury operations improved.* Jul, 645
Taseko gains 100% of Fish Lake. Feb, 106
Canyon Resources:
Briggs gets feasibility OK. Jun, 496
Echo Bay plans to join Seven-Up Pete. Jul, 632
seeks Seven-Up Pete permits. Mar, 192
Carnon Consolidated, considers closing Cornish tin mine. Mar, 194
Carter Mining:
Peabody completes acquisition. Nov, 1215
sold to Peabody. Oct, 1132
Caterpillar, introduces new hydraulic excavator and shovel. Oct, 1159
Cavender, B.W.: *Strategic ramifications of corporate environmental policy.* Mar, 204
Cawley, J.C.: *On-board electrical diagnostic system to improve the availability of continuous mining machines.* Aug, 987
Cecala, A.B.: *Determination of optimal longwall face methane monitoring locations.* Feb, 141
Cement, industrial minerals review.* Jun, 525
Centurion Mines:
acquires Montana Reserves Corp. Apr, 282
acquires more property in Tintic district. Oct, 1133
buys private claims in Utah. Jul, 633
Channel tunnel:
finally finished. Jan, 23
may be a pricey deal. Feb, 94
Chile:
Coeur d'Alene begins building Fachinal Mine. Sep, 1043
Coeur d'Alene can acquire 51% of Faride gold mine. Oct, 1135
Coeur d'Alene gains control of El Bronce Mine. Nov, 1217
Coeur d'Alene proceeds with final feasibility at Fachinal. Feb, 110
Dayton begins Andacollo project. Dec, 1326
Dayton gets financing for Andacollo project. May, 398
China:
company to conduct feasibility study of coal property. Apr, 284
consortium to build coal slurry pipeline. Oct, 1129
outlines gold development plans. Dec, 1319
Chlorine, industrial minerals review.* Jun, 527
Christian, J.M.: *What to make of gold.* Dec, 1346
Chromite, industrial minerals review.* Jun, 527
Church, R.: *Truck-shovel operations in the southern Powder River Basin.* Aug, 960
CIS:
Asarco to develop Russian gold property. Oct, 1132
classification of reserves and resources.* Mar, 214
European Bank financing resource projects. Jul, 615
former Soviet Union's gold reserves less than thought. Apr, 262
Newmont gets financing for Zarafshan venture. May, 399
Uzbekistan makes uranium deal with US. Dec, 1323
Clark, S.: *Factors involved in building the Guanacevi project in Mexico.* Apr, 306
Clays, industrial minerals review.* Jun, 529
Clean Coal Technology, 13 project share $1 million. Sep, 1044
Clean Water Act, another threat to mining. Jun, 488
Cleveland-Cliffs,buys Cyprus Amax's iron ore unit. Sep, 1041
Coal blending - meeting specifications: B.J. Arnold, D.B. Smith. Oct, 1144
Coal:
13 CCT projects share $1 million. Sep, 1044
annual review introduction.* May, 433
Arco wins bid for Colorado tracts. Feb, 110
ash finding economical uses. Aug, 934
belt haulage vehicles aid coal dump reclamation.* Jul, 654
benefits of a quality assurance program.* Oct, 1141
bituminous exports down. Jun, 498
Black Lung legislation will impact industry. Oct, 1126
British go private. Aug, 920
coal blending, meeting specifications.* Oct, 1144
company to conduct feasibilty study of Chinese property. Apr, 284
Consol to buy Westmoreland's Criterion Mine. Oct, 1136
consortium to build slurry pipeline in China. Oct, 1129
Cyprus Amax closes Orchard Valley Mine. Nov, 1229
designing for process control at Mingo Logan.* Jan, 34
Eastern Associated opens West Virginia coal mine. Dec, 1327
environmental regulation in the Powder River Basin.* Aug, 973
gains in coal loading.* Jan, 65
Illinois production falls by a third. Aug, 929
important to Wyoming's economy.* Aug, 943
imports headed up. Jun, 486
Indonesian coal projects updated. Jan, 15
location of methane monitors.* Feb, 141
longwall, continuous miner productivity requirements.* Aug, 995
maritime tax increase would hurt producers. Sep, 1024
markets for Powder River Basin coal.* Aug, 951
new grinding approach may save energy. Sep, 1022
new technology for longwall ground control. Jul, 622
Ohio Valley, utility discuss coal contract. Sep, 1042
overburden stripping in the Powder River Basin.* Aug, 963
Peabody adds to Australian holdings. Apr, 278
Peabody buys Carter Mining from Exxon. Oct, 1132
Peabody closes Illinois mine. Jul, 614
Peabody completes Carter acquisition. Nov, 1215
Peabody wins Kentucky conservation award. Oct, 1131
Peabody's Marissa, Randolph projects resume operations. Apr, 280
Powder River Basin economic, tax, royalty implications.* Aug, 947
Powder River Basin geology, geography.* Aug, 955
Powder River Basin: Mother Lode of compliance coal.* Aug, 939
process converts leonardite into char. Aug, 930
production up in 1994. Mar, 187
rail haulage challenges in the Powder River Basin.* Aug, 965
safety practices in the Powder River Basin.* Aug, 969
seventeen executives killed in plane crash. Nov, 1221
Shoal Creek mine opens. Sep, 1035
single-shift sampling challenged. Aug, 922
truck-shovel operations in the Powder River Basin.* Aug, 960
turbulent deposition rates of dust in airways.* Jan, 59
US production expected to rebound. Sep, 1036
utilities switch to low sulfur to meet clean air regs. Jul, 596
Westmoreland closes Hampton mine, prep plant. Apr, 282
work order systems at Coteau.* Dec, 1329
Cobalt:
Sherritt plans Cuban venture. Aug, 932
Tanzanian property drilled. Apr, 284
Coeur d'Alene Mines:
acquires right to buy 51% of Faride gold mine. Oct, 1135
begins building Fachinal Mine. Sep, 1043
forms silver company with Asarco. Nov, 1217
gains control of El Bronce Mine. Oct, 1217
proceeds with final feasibility at Fachinal. Feb, 110
Cogsnet:
finding, downloading files. Dec, 1349
valuable service to SME members. Sep, 1047
Colorado:
exploration review.* May, 409
museum starts aggregates exhibit. Dec, 1322
Summitville not as bad as first thought. May, 398
Cominco, makes discovery in Turkey. Dec, 1321
Comminution, annual review.* May, 440
Commissioning Asarco's Ray expansion: P.J. Coughlin. Jul, 637
Comparative testing of water-powered and pneumatic jackleg rock drills: J. Paraszczak, S. Planeta, H. Ouellet. Aug, 999
Computer applications in the explosives industry: R.B. Hoppler. Jun, 505
Computer use in the minerals industry: B.L. Gibbs. Mar, 208
Computerized mine planning in Michigan iron ore: A.E. Koski. Dec, 1338
Computers:
applications in explosives industry.* Jun, 505
automating surface mines.* Jun, 510
catalyst for information accessibility.* Jun, 516
downloading files on Cogsnet. Dec, 1349
high tech tools help Barrick at Mercur. Jan, 24
use in the minerals industry.* Mar, 208
work order systems at Coteau.* Dec, 1329
mine planning in iron ore.* Dec, 1338
Computers: The catalyst for information accessibility: B.L. Gibbs. Jun, 516
Concentration, annual review.* May, 440
Congress:
another Mining Law compromise put forth. Jul, 598
Black Lung reauthorization will impact coal industry. Oct, 1126
Clean Water Act another threat to mining. Jun, 488
conference committee begins work. Aug, 922
conference committee debates Mining Law. Jan, 5
debates Superfund reauthorization. Aug, 922

House conferees make Mining Law counteroffer. Oct, 1126
House passes California Desert Protection Act. Sep, 1024
maritime tax would hurt coal producers. Sep, 1024
Mining Law heads list of public lands issues. Feb, 96
Mining Law reform dies. Nov, 1212
passes California Desert Protection Act. Nov, 1212
private property rights bill introduced. Apr, 262
why Mining Law reform failed. Dec, 1316
Consolidation Coal, to buy Westmoreland Coal mine. Oct, 1136
Construction aggregates, industrial minerals review.* Jun, 530
Continental Conveyor, solves belt slippage problems. Mar, 218
*Continuous surface mining equipment: How to achieve success:** E. DeLilla. Nov, 1259
Conveyors:
in-pit conveying at Highland Valley Copper.* Oct, 1186
Shoal Creek uses strongest in America. Sep, 1035
*Copper heap leaching at San Manuel:** J.G. Jenkins. Sep, 1094
*Copper hydrometallurgy - evolution and milestones:** N. Arbiter, A.W. Fletcher. Feb, 118
Copper:
adds $5.68 billion to Arizona economy. Jul, 614
Asarco develops new deposit at Mission. Nov, 1227
Cambior invests in Argentina. Nov, 1219
Centurion acquires more Tintic property. Oct, 1133
commissioning Asarco's Ray expansion.* Jul, 637
economic potential of Malanjkhand deposit, India.* Mar, 221
Freeport expands again at Irian Jaya. Feb, 110
Freeport offers Indonesian update. Nov, 1215
Freeport reports another discovery at Grasberg. Aug, 931
heap leaching at San Manuel.* Sep, 1094
hydrometallurgy, evolution and milestones.* Feb, 118
in-pit crushing, conveying at Highland Valley.* Oct, 1186
Indonesian smelter to be built. Jun, 495
installing cyclones at Cyprus Sierrita.* Sep, 1057
Magma wins bid for Tintaya project. Nov, 1222
mill expansions at Freeport Indonesia.* Sep, 1051
Phelps Dodge begins Morenci expansion. Jul, 620
Pinto Valley gets new shovel. Jan, 17
production rises for 10th year. Sep, 1040
San Manuel hoists record tonnage. Jul, 596
Southern Peru gets loan for expansion. Apr, 282
Taseko gains 100% of Fish Lake. Feb, 106
Cornachione, M.A.: Laboratory investigation of bio-heap leaching to remove sulfur from kiln feed materials.* Feb, 153
*Cost of compliance with potential future federal mine waste regulations for copper heap/dump leaching:** L.B. Rothfeld, R.L. Dolzani. Sep, 1089
*Coteau Properties, work order systems.** Dec, 1329
Coughlin, P.J.: *Commissioning Asarco's Ray expansion.** Jul, 637
CPM Group:
gold price not an inflation indicator. Apr, 276
CRA, completes impact assessment for Century zinc mine. Jul, 633
Craig, L., speaks at SME Annual Meeting.* Apr, 323
Crown Resources, considers buying seven Argentinian properties. Mar, 194
Crushing and grinding:
in-pit crushing at Highland Valley Copper.* Oct, 1186
installing cyclones at Cyprus Sierrita.* Sep, 1057
variable speed SAG mills.* Nov, 1273
Cuba, Sherritt plans nickel-cobalt venture. Aug, 932
CVG-Ferromineral Orinoco, to double iron ore capacity in Venezuela. Apr, 283
Cyprus Amax:
coal unit closes Orchard Valley Mine. Nov, 1229
earnings increase, layoffs continue. Jun, 497
installing cyclones at Sierrita.* Sep, 1057
radio remote control mining.* Jun, 503
sells iron ore unit to Cliffs. Sep, 1041
sells oil and gas unit. Apr, 277
signs gold agreement with Guinea. Jan, 19

D

Davis, G.: *US share of world mineral markets: Where are we headed?** Sep, 1067
Davy International, contracted to study Brazilian nickel project. Apr, 284
Dayton Mining:
begins building Andacollo mine. Dec, 1326
secures financing for Andacollo project. May, 398
DeLilla, E.: *Continuous surface mining equipment: How to achieve success.** Nov, 1259
Delta Gold, plans Zimbabwe platinum project. Mar, 189
Demag, Pinto Valley buys shovel. Jan, 17
*Designing for process control at Mingo Logan:** B. Hern. Jan, 34
*Determination of optimal longwall face methane monitoring locations:** A.B. Cecala, J.A. Zimmer, E.D. Thimons. Feb, 141
Dewatering, annual review.* May, 443
Diamonds:
company prospecting coast of Africa. Feb, 108
industrial minerals review.* Jul, 662
Diatchkov, S.A.: *Principles of classification of reserves and resources in the CIS countries.** Mar, 214
Dimension stone, industrial minerals review.* Jun, 531
Dolph, J.: *Rock bursts at Hecla: A personal experience.** Jul, 658
Dolzani, R.L.: *Cost of compliance with potential future federal mine waste regulations for copper heap/dump leaching.** Sep, 1089
*Downsizing maintenance to improve performance: Defining the downsizing task:** P.D. Tomlingson. Sep, 1065
Drift of things:
aluminum fundamentals, Wyoming trona. Nov, 1210
CCT technology export market. Mar, 176
coal grinding may save energy. Sep, 1022
Escondida expansion planned, Hecla produces record silver. Oct, 1124
Latin American wages, EIA says coal imports up, Summitville problems resolved. Jun, 486
mining in Mexico, reconsider Bureau cuts, Soviet gold reserves. Apr, 262
mining prospects in South Africa, British coal mines go private, salt owners increase productivity. Aug, 920
notes from 1993 Annual Review. May, 378
optical sensors developed to help processors. Jan, 4
USBM threatened with budget cuts. Feb, 94
utilities switch to low-sulfur coals. Jul, 596
Drilling:
compact rig ideal for narrow veins. Feb, 106
comparing water-powered and pneumatic jacklegs.* Aug, 999
Drummond:
Shoal Creek coal mine opens. Sep, 1035
Shoal Creek uses strongest conveyor. Sep, 1035
Duerte, I.B.: *Factors involved in building the Guanacevi project in Mexico.** Apr, 306

E

*Earthmoving in the information age:** C.L. Schaidle. Jun, 507
Eastern Associated, opens Mountain View coal mine. Dec, 1327
Echo Bay Minerals, plans to join Seven-Up Pete. Jul, 632
*Economic potential of the Malanjkhand Proterozoic porphyry copper deposit, M.P. India:** D.B. Sikka, R.B. Bhappu. Mar, 221
Economics:
classification of reserves and resources in the CIS.* Mar, 214
coal ash finding many uses. Aug, 934
copper mining adds $5.68 billion to Arizona economy. Jul, 614
effects of NAFTA on mining in Mexico.* Apr, 320
European Bank financing CIS resource projects. Jul, 615
gold becoming major Indonesian export. Feb, 107
gold price is not an inflation indicator. Apr, 276
investors returning to gold. Jul, 624
markets for Powder River Basin coal.* Aug, 951
Mexican mining law encourages investment. Feb, 109
outlook for North American sulfur market.* Jun, 563
Powder River Basin implications.* Aug, 947
Powder River Basin important to Wyoming's economy.* Aug, 943
review of mineral royalty information.* Jul, 641
some changes in mining are positive. Feb, 105
US share of world mineral markets.* Sep, 1067
what to make of gold.* Dec, 1346
Edmonson, N.: *North America sulfur market: Structure and outlook.** Jun, 563
Education:
mining education available at Mexican universities.* Apr, 322
mining engineering enrollment increases. Mar, 188
NSTA convention highlights. Feb, 132
Rolla students design underground cutting machine. Oct, 1130
SME benefits from coloring book. Dec, 1325
*Effective maintenance downsizing techniques: The starting point:** P.D. Tomlingson. Oct, 1156
*Effects of NAFTA on mining in Mexico:** D.D. Spencer. Apr, 320
*Eight mining leaders inducted into the National Mining Hall of Fame and Museum:** Sep, 1070
El Condor, merges with Pegasus. Apr, 275
*Electrowinning of gold and silver from copper-bearing cyanide solutions:** F.H. Nehl. Jun, 568
Endangered Species Act, Independence Mining discusses issue. Mar, 191
Energy minerals processing, annual review.* May, 444
*Engineering geology of Barrick Goldstrike Mines' Betze pit:** M.R. Smith, R.P. Sharon. Jan, 29
Environment:
annual review.* May, 424
audits: a shield, a sword or Trojan horse?* Mar, 230
belt haulage vehicles aid coal dump

reclamation.* Jul, 654
cost of compliance for copper heap/dump leaching.* Sep, 1089
environmental revolution, stage two.* Jul, 650
strategic ramifications of corporate policy.* Mar, 204
House passes California Desert Protection Act. Sep, 1024
Mexican laws.* Apr, 317
Philip Hocker speaks at SME Annual Meeting.* Apr, 323
regulations in the Powder River Basin.* Aug, 973
Sudbury operations improved.* Jul, 645
Summitville added to Superfund priority list. Jul, 632
Summitville not as bad as first thought. May, 398
Environmental audits: A shield, a sword or a Trojan horse?: G.V. Basham. Mar, 230
Environmental laws of Mexico: J.A. Holtkamp. Apr, 317
Environmental regulations in the Powder River Basin: M. Loomis. Aug, 973
Environmental revolution: Stage two: J.E. Tilton. Jul, 650
EPA, Superfund reauthorization debated. Aug, 922
Equipment:
annual review, surface.* May, 426
annual review, underground.* May, 427
belt haulage vehicles aid coal dump reclamation.* Jul, 654
Bureau develops radial-axial splitter. Dec, 1319
Caterpillar introduces new hydraulic excavator and shovel. Oct, 1159
comparing water-powered and pneumatic jacklegs.* Aug, 999
continuous surface mining equipment.* Nov, 1259
developments in truck electronics.* Jun, 513
dragline stripping in Powder River Basin.* Aug, 963
earthmoving in the information age.* Jun, 507
matching longwall, continuous miner productivity requirements.* Aug, 995
mining into the 21st century.* Jun, 518
on-board electrical diagnostic systems for continuous miners.* Aug, 987
optimizing truck-loader matching.* Oct, 1179
performance of dragline hoist and drag ropes.* Nov, 1285
Rolla students design rock cutting machine. Oct, 1130
Shoal Creek strongest conveyor in America. Sep, 1035
truck-shovel operations in the Powder River Basin.* Aug, 960
Wagner adds six-wheel-articulated truck. Jun, 501
Exploration:
annual review introduction.* May, 405
Atlas explores Nevada properties. Dec, 1324
Cominco makes discovery in Turkey. Dec, 1321
company prospecting coast of Africa. Feb, 108
Cyprus Amax signs agreement with Guinea. Jan, 19
Freeport offers Indonesian update. Nov, 1215
Freeport reports another discovery at Grasberg. Aug, 931
geology of the Yarnell gold deposit.* Sep, 1061
gold dollars going outside of US. Jul, 596
Homestake finds gold at Eureka. Jan, 16
Homestake studies Archimedes project. Dec, 1320
Pegasus to explore Diamond Hill. Jul, 632
Placer Dome outlines plans for expanded output. May, 397
Royal Gold releases South Pipeline drilling results. Oct, 1133
USMX's Dewey Dome looks promising. Feb, 106
vocational and technical education.* Feb, 128
Exxon:
completes Carter sale. Nov, 1215
sells Carter Mining to Peabody. Oct, 1132

F

Factors involved in building the Guanacevi project in Mexico: K.A. McDonald, et al. Apr, 306
Fan, F.: *Simulator for degasification, methane emission prediction and mine ventilation.* Apr, 341
Feldspar, industrial minerals review.* Jun, 532
Filas, B.:
professional registration. May, 403
Professional registration exam. Ju, 491
FirstMiss Gold, pressure oxidation at Getchell.* Feb, 115
Fletcher, A.W.: *Copper hydrometallurgy - evolution and milestones.* Feb, 118
Flocculation, annual review.* May, 443
Floor bolting for control of mine floor heave: J.C. Stankus, S.S. Peng. Sep, 1099
Flotation:
annual review, chemistry.* May, 445
annual review, process analysis.* May, 447
Fluorspar, industrial minerals review.* Jun, 532
FMC Gold, acquires remainder of Beartrack Mine. Jul, 634
Franklin Industrial Minerals, acquires KMG Minerals. Nov, 1227
Freas, R.C.:
Tennessee zinc - A status report.* Oct, 1152
president's interview.* Mar, 195
Freeport-McMoRan:
acquires Spanish phosphate business. Dec, 1323
expands again at Irian Jaya. Feb, 110
group will develop Indonesian copper smelter. Jun, 495
Indonesian update. Nov, 1215
Irian Jaya operations expands to 90 kt/d (99,000 stpd). Jan, 23
Main Pass reaches full capacity. Mar, 190
mill expansions at Freeport Indonesia.* Sep, 1051
reports another discovery at Grasberg. Aug, 931
spins off copper-gold unit. Jun, 498
Futuristic look at process control in the minerals industry: L.B. Hales, R.A. Ynchausti. Jan, 43

G

Garnet, industrial minerals review.* Jun, 533
Gems, industrial minerals review.* Jun, 534
Gentry, D., reviews Latin American mining. Feb, 109
Geochemistry:
exploration review.* May, 406
vocational and technical skills.* Feb, 128
Yarnell gold deposit.* Sep, 1061
Geology and geochemistry of the Yarnell gold deposit: T.C. Page, M.A. Miller, P.C. Gibson, J.D. Sell. Sep, 1061
Geology and mineralization of the Santa Rosa gold deposits, Panama: D.C. White. Apr, 346
Geology:
engineering geology at Goldstrike.* Jan, 29
Powder River Basin geology, geography.* Aug, 955
Santa Rosa gold deposits, Panama.* Apr, 346
Yarnell gold deposit.* Sep, 1061
Geostatistics, Jackling lecture.* Jun, 557
Gertsch, R.E.: *Mechanical mining: Challenges and directions.* Nov, 1250
Getchell Mine pressure oxidation circuit four years after startup: D. Matthews. Feb, 115
Gibbs, B.L.:
Cogsnet is a valuable service to SME members. Sep, 1047
finding, downloading files on Cogsnet. Dec, 1349
Gibbs, B.L.: *Computer use in the minerals industry.* Mar, 208
Gibbs, B.L.: *Computers: The catalyst for information accessibility.* Jun, 516
Gibson, P.C.: *Geology and geochemistry of the Yarnell gold deposit.* Sep, 1061
Glass, G.B.: *Wyoming's Powder River Basin - geology and geography of the nation's largest coal field.* Aug, 955
GMG International, acquires Mexican mine. Nov, 1227
Gold:
Amax Gold to build Fort Knox. Jun, 497
American Barrick company profile.* Nov, 1231
American Barrick poised for future growth.* Nov, 1233
annual review.* May, 424
Asarco to develop Russian property. Oct, 1132
Atlas explores Nevada properties. Dec, 1324
Barrick outlines global plans. Dec, 1319
becoming major export for Indonesia. Feb, 107
building Mexico's Guanacevi project.* Apr, 306
bulk flotation at McLaughlin Mine.* Dec, 1343
Cambior grows and diversifies.* Nov, 1244
Canyon Resources gets feasibility OK for Briggs. Jun, 496
Canyon, PD seek Seven-Up Pete permits. Mar, 192
Centurion acquires more Tintic property. Oct, 1133
Coeur d'Alene begins building Fachinal Mine. Sep, 1043
Coeur d'Alene can acquire 51% of Faride mine in Chile. Oct, 1135
Coeur d'Alene gains control of El Bronce Mine. Nov, 1217
Cominco makes discovery in Turkey. Dec, 1321
Cyprus Amax signs agreement with Guinea. Jan, 19
Dayton begins Andacollo project. Dec, 1326
Dayton gets financing for Andacollo project. May, 398
electrowinning gold from copper-bearing cyanide.* Jun, 568
engineering geology at Goldstrike.* Jan, 29
Eskay Creek plans underground mine. Apr, 277
exploration dollars going out of US. Jul, 596
Freeport expands again at Irian Jaya. Feb, 110
Freeport offers Indonesian update. Nov, 1215
geology of Panama's Santa Rosa deposits.* Apr, 346
geology of the Yarnell deposit.* Sep, 1061
Goldstrike sends Barrick to top of producers.* Nov, 1232
heap leach pad liner systems.* Jan, 46
Hecla closing Republic unit. Dec, 1327
Hecla starts production at La Choya. Mar, 190
Hecla to develop Gold Hunter deposit. Sep, 1041
Homestake studies Archimedes project. Dec, 1320
Homestakes finds gold at Eureka. Jan, 16
investors return. Jul, 624
La Cienega, a new Mexican mine.* Apr, 303
Meikle will add high-grade ore to Goldstrike.* Nov, 1237
mining companies pledge $120,000 to honor medal winners. Apr, 279
Nevada mines produced record amounts. Jul, 617
Newmont approves Indonesian mine. Sep, 1040
Newmont begins Uzbekistan project. Jan, 121

Newmont commercializes biooxidation process. Apr, 273
Newmont gets financing for Zarafshan venture. May, 399
Newmont lets contract for Indonesian study. Nov, 1218
Placer Dome outlines plan for gold output. May, 397
pressure oxidation startup at Getchell.* Feb, 115
price is not an inflation indicator. Apr, 276
Royal Gold acquires 138 claims in Nevada. Apr, 282
Royal Gold begins production at Crescent. Oct, 1132
Royal Gold releases South Pipeline drilling results. Oct, 1133
Royal Gold, Santa Fe Gold make deal. Dec, 1326
Santa Fe Pacific Gold spun off. Aug, 931
Santa Fe Pacific proceeds with Twin Creeks sulfide project. Nov, 1221
Santa Fe Pacific reports 26% reserve increase. Mar, 189
Taseko gains 100% of Fish Lake. Feb, 106
USMX finds more at Noche Buena. Apr, 283
USMX's Dewey Dome looks promising. Feb, 106
what to make of gold.* Dec, 1346
Goldstrike propels Barrick to forefront of gold producers: S. Kral. Nov, 1232
Goldstrike:
engineering geology in Betze pit.* Jan, 29
propels Barrick to forefront of gold producers.* Nov, 1232
Golosinski, T.S.: *Performance of dragline hoist and drag ropes.* Nov, 1285
Gove, D.: *Optimizing truck-loader matching.* Oct, 1179
Graham, R., named Bureau of Mines director. Oct, 1126
Graphite, industrial minerals review.* Jun, 535
Grayson, R.L.: *Matching longwall and continuous miner productivity requirements.* Aug, 995
Great Salt Lake Minerals, doubles Salt Lake brines production. Jan, 18
Greenland, open to foreign mining investment. Jun, 494
Greur, R.: *Recent improvements in the MFIRE ventilation and fire simulator.* Feb, 145
Groppo, J.G.: *Are big gains in coal loading possible? A look at some fundamentals.* Jan, 65
Ground water, analytical solution for inflow estimates.* Feb, 149
Guinea, Cyprus Amax signs exploration agreement. Jan, 19
Gypsum, industrial minerals review.* Jun, 535

H

Hales, L.B.: *Futuristic look at process control in the minerals industry.* Jan, 43
Hanna, T.M.: *Use of an analytical solution for preliminary estimates of ground water inflow to a pit.* Feb, 149
Haptonstall, J.C.: Bismark: *Mexico's new major zinc mine.* Apr, 295
Harnischfeger, will acquire Joy Technologies. Oct, 1135
Hartzler, W.M.: *Wyoming Powder River Basin coal: Economic, tax and royalty implications.* Aug, 947
Haywood, C.: *Putting together a mining exhibit for Denver's NSTA convention.* Feb, 132
Health & safety:
annual review.* May, 425
Bureau develops radial-axial splitter. Dec, 1319
coal annual review.* May, 436
improvements in MFIRE fire simulator.* Feb, 145
location of methane monitors.* Feb, 141
practices, challenges in the Powder River Basin.* Aug, 969
Sentinels of Safety winners announced. Sep, 1042
simulator for methane emission prediction.* Apr, 341
single-shift coal sampling challenged. Aug, 922
turbulent depositions rates of coal dust in airways.* Jan, 59
Heap leach pad liner systems in North America: A.J. Breitenbach. Jan, 46
Heap leaching:
copper leaching at San Manuel.* Sep, 1094
cost of compliance for copper.* Sep, 1089
pad liner systems in North America.* Jan, 46
removing sulfur from kiln feed materials.* Feb, 153
Hecla Mining:
closing Republic unit. Dec, 1327
Lucky Friday hoist breaks. Nov, 1220
produces 3.11 kt (100 million oz) of silver. Oct, 1124
Rock bursts, a personal experience.* Jul, 658
starts production at La Choya. Mar, 190
to develop Gold Hunter deposit. Sep, 1041
Hern, B.: *Designing for process control at Mingo Logan.* Jan, 34
High-energy hydraulic hammer ratings: E.E. Baur. Jul, 656
Hill, L.N.: *Installing cyclones on the primary grinding circuit at Cyprus Sierrita.* Sep, 1057
Hocker, P., speaks at Annual Meeting.* Apr, 323
Holgate, W.A.: *Safety practices and challenges in the Powder River Basin.* Aug, 969
Holtkamp, J.A.: *Environmental laws of Mexico.* Apr, 317
Homestake Mining:
bulk flotation at McLaughlin Mine.* Dec, 1343
discovers gold at Eureka. Jan, 16
plans underground mine at Eskay Creek. Apr, 277
studies Archimedes project. Dec, 1320
Hoppler, R.B.: *Computer applications in the explosives industry.* Jun, 505
How the Mexican Mining Law works: L. White. Apr, 313
Howell, G.D., named SME executive director. Feb, 95, 105
Hydrometallurgy Fundamentals technical sessions:* S. Kral. Feb, 124
Hydrometallurgy:
annual review.* May, 449
evolution and milestones.* Feb, 118
technical sessions wrapup.* Feb, 124

I

Idaho:
exploration review.* May, 410
Hecla to develop Gold Hunter deposit. Sep, 1041
USMX's Dewey Dome looks promising. Feb, 106
Illinois:
coal production falls by a third. Aug, 929
exploration review.* May, 412
Peabody closes mine. Jul, 614
Importance of the coal industry to state and local economies of Wyoming: E.F. Mathers, Jr. Aug, 943
In situ leaching wellfield design at San Manuel: K.L. Wiley, D.S. Ramey, M.J. Rex. Aug, 991
In situ leaching, wellfield design at San Manuel.* Aug, 991
In-pit crushing and conveying at Highland Valley Copper: A.D. MacPhail, D.M. Richards. Oct, 1186
Inco, Sudbury operations improved.* Jul, 645
Independence Mining, discusses Endangered Species Act. Mar, 191
India, economic potential of the Malanjkhand deposit.* Mar, 221
Indiana, exploration review.* May, 413
Indonesia:
coal projects updated. Jan, 15
copper smelter to be built. Jun, 495
Freeport offers update. Nov, 1215
Freeport reports another discovery at Grasberg. Aug, 931
gold becoming major export. Feb, 107
mill expansions at Freeport.* Sep, 1051
Newmont approves gold mine. Sep, 1040
Newmont lets contract for study of gold property. Nov, 1218
Industrial minerals:
Franklin acquires KMG Minerals. Nov, 1227
Freeport acquires phosphate business. Dec, 1323
Mexican industry.* Apr, 311
museum starts aggregates exhibit. Dec, 1322
reconstruction of the Port Inland limestone operation.* Oct, 1149
Sunrise Stone opens Wyoming plant. Sep, 1038
Industrial waste processing, annual review.* May, 449
Installing cyclones on the primary grinding circuit at Cyprus Sierrita: L.N. Hill. Sep, 1057
Instrumentation and control, annual review.* May, 450
Interior department, Babbitt to establish National Biological Survey. Jan, 5
Interview with Robert C. Freas, 1994 SME President: T. O'Neil. Mar, 195
Ireland, zinc mine gets approval. Jun, 494
Iron ore:
Cliffs to buy Cyprus Amax's unit. Sep, 1041
company to double capacity at Venezuelan mine. Apr, 283
computerized mine planning.* Dec, 1338
natural pigments - rebirth through innovation.* Jan, 70
vacuum disk retrofits assist processing. Oct, 1161
Venezuelan producer to double capacity. May, 397
ISO 9000, SME conference provides approach ISO question. Aug, 935
Iwasaki, I.: *Mineral processing to material processing.* Dec, 1361

J

Jackling Lecture, mining geostatistics.* Jun, 557
Jenkins, J.G.: *Copper heap leaching at San Manuel.* Sep, 1094
Johnson, A.M.: *Laboratory investigation of bio-heap leaching to remove sulfur from kiln feed from materials.* Feb, 153
Johnson, P.W.: *Simulator for degasification, methane emission prediction and mine ventilation.* Apr, 341
Johnston, B.:
fails to find Mining Law compromise. Nov, 1212
Mining Law counteroffer made. Oct, 1124
offers compromise on Mining Law. Jun, 488
Joy Technologies, acquired by Harnischfeger. Oct, 1135

K

Kemeny, J.M.: *Practical technique for determining the size distribution of blasted benches, waste dumps and heap leach pads.* Nov, 1281
Kennecott, sells Ridgeway to Kinross. Nov, 1228
Kentucky, exploration review.* May, 414
Kieffer, L.D.: *Mill expansions at PT Freeport Indonesia.* Sep, 1051
Kinross Gold, buys Ridgeway from Kennecott. Nov, 1228
KMG Minerals, acquired by Franklin. Nov, 1227
Kohler, J.L.: *On-board electrical diagnostic system to improve the availability of continuous mining machines.* Aug, 987
Koski, A.E.: *Computerized mine planning in Michigan iron ore.* Dec, 1338
Kost, K.: *Truck-shovel operations in the southern Powder River Basin.* Aug, 960
Kral, S.:

American Barrick, company profile.* Nov, 1231
Goldstrike sends Barrick to top of producers.* Nov, 1232
Meikle Mine wrapup.* Nov, 1237
Kral, S.: *Goldstrike propels Barrick to forefront of gold producers.* * Nov, 1232
Kral, S.: *Hydrometallurgy Fundamentals technical sessions.* * Feb, 124
Kral, S.: *Meikle will add high-grade, underground ore.* * Nov, 1237

L

*La Cienega: A new gold mine in Mexico:** F.G. Munoz. Apr, 303
La Teko Resources, acquires Alaska property from Amax Gold. Mar, 194
Laage, L.: *Recent improvements in the MFIRE ventilation and fire simulator.* * Feb, 145
*Laboratory investigation of bio-heap leaching to remove sulfur from kiln feed materials:** M.A. Cornachione, A.M. Johnson. Feb, 153
Lac Minerals, acquired by American Barrick.* Nov, 1233
Latin America:
Bismark, a major Mexican zinc mine.* Apr, 295
building Mexico's Guanacevi gold project.* Apr, 306
effects of NAFTA on mining in Mexico.* Apr, 320
Hecla begins production at La Choya, Mexico. Mar, 190
La Cienega, a new Mexican gold mine.* Apr, 303
Mexican environmental laws.* Apr, 317
Mexican mining law encourages investment. Feb, 109
Mexican Mining Law explained.* Apr, 313
Mexico's industrial minerals industry.* Apr, 311
mining education available at Mexican universities.* Apr, 322
new mining districts in Mexico.* Apr, 292
NWMA property review. Feb, 109
wages vary widely. Jun, 486
Lead:
CIM overview. Jul, 613
MIM buys portion of Cannington project. May, 402
Legislation:
another Mining Law compromise put forth. Jul, 598
Black Lung reauthorization will impact coal industry. Oct, 1126
Clean Water Act another threat to mining. Jun, 488
conference committee begins work. Aug, 922
conference committee debates Mining Law. Jan, 5
Congress passes California Desert Protection Act. Nov, 1212
House conferees make Mining Law counteroffer. Oct, 1126
House passes California Desert Protection Act. Sep, 1024
Independence Mining discusses Endangered Species Act. Mar, 191
Johnston offers compromise on Mining Law. Jun, 488
maritime tax would hurt coal producers. Sep, 1024
Mining Law reform dies. Nov, 1212
Mining Law reform heads list of public lands issues. Feb, 96
private property rights bill introduced. Apr, 264
Superfund reauthorization debated. Aug, 922
why Mining Law reform failed. Dec, 1316
Leonard, J.W.: *Are big gains in coal loading possible? A look at some fundamentals.* * Jan, 65
Li, J.: *Some observations on turbulent deposition rates of coal dust in mine airways.* * Jan, 59
Lime, industrial minerals review.* Jun, 536
Limestone, reconstruction of Port Inland.* Oct, 1149
Lithium:
Argentine brines. Jul, 660
industrial minerals review.* Jun, 537
Longwall mining:
location of methane monitors.* Feb, 141
matching productivity requirements.* Aug, 995
new technology for ground control. Jul, 622
Lonrho, to explore Vietnamese iron ore deposit. Jan, 23
Loomis, M.: *Environmental regulations in the Powder River Basin.* * Aug, 973
Lopez, L.: *New mining districts in Mexico.* * Apr, 292

M

MacMillan, R.A.: *New developments in mining truck electronics.* * Jun, 513
MacPhail, A.D.: *In-pit crushing and conveying at Highland Valley Copper.* * Oct, 1186
Madonna, J.A.: *Vocational and technical education in geoscience with emphasis on geochemical exploration skills.* * Feb, 128
Magma Copper:
copper heap leaching at San Manuel.* Sep, 1094
Pinto Valley gets new shovel. Jan, 17
San Manuel hoists record tonnage. Jul, 596
wins bid for Tintaya project. Nov, 1222
Mahoney, W.J.: *Benefits of a good quality assurance program to an electric utility.* * Oct, 1141
Maintenance:
downsizing to improve performance, part 1.* Sep, 1065
effective downsizing, part 2.* Oct, 1156
*Major Inco project improves Sudbury operations:** L. White. Jul, 645
Manganese, industrial minerals review.* Jun, 538
Mariscal, F.A.: *Factors involved in building the Guanacevi project in Mexico.* * Apr, 306
*Markets for southern Powder River Basin coal:** G.E. Vaninetti, C. Worrall. Aug, 951
*Matching longwall and continuous miner productivity requirements:** M.P. Miano, R.L. Grayson, S. Yuan. Aug, 995
Mathers, E.F.: *Importance of the coal industry to state and local economies of Wyoming.* * Aug, 943
Matthews, D.: *Getchell Mine pressure oxidation circuit four years after startup.* * Feb, 115
Mauney, S.S.: *Natural iron oxide pigments - rebirth through innovation.* * Jan, 70
McDonald, K.A.: *Factors involved in building the Guanacevi project in Mexico.* * Apr, 306
Mechanical mining:
annual review.* May, 425
challenges and directions.* Nov, 1250
continuous surface equipment.* Nov, 1259
performance prediction is key in hard rock mining.* Nov, 1263
underground hard rock.* Nov, 1254
*Mechanical mining: Challenges and directions:** R.E. Gertsch. Nov, 1250
*Meikle will add high-grade, underground ore:** S. Kral. Nov, 1237
Mexico:
Bismark, a major zinc mine.* Apr, 295
building the Guanacevi project.* Apr, 306
effects of NAFTA on mining.* Apr, 320
environmental laws.* Apr, 317
Hecla starts gold production at La Choya. Mar, 190
industrial minerals industry.* Apr, 311
La Cienega, a new gold mine.* Apr, 303
mining education available.* Apr, 322
mining information sources. Apr, 262
mining law encourages investment. Feb, 109
Mining Law explained.* Apr, 313
new mining districts.* Apr, 292
USMX finds more gold at Noche Buena. Apr, 283
Miano, M.P.: *Matching longwall and continuous miner productivity requirements.* * Aug, 995
Michigan, computerized mine planning.* Dec, 1338
*Mill expansions at PT Freeport Indonesia:** R.L. Russell, L.D. Kieffer. Sep, 1051
Miller, M.A.: *Geology and geochemistry of the Yarnell gold deposit.* * Sep, 1061
MIM, buys portion of Cannington project. May, 402
Mineral Information Institute, releases new poster. Apr, 274
*Mineral potential of Namibia:** C. Premoli. Jan, 39
*Mineral processing to material processing:** I. Iwasaki. Dec, 1361
Minerals processing:
designing for process control at Mingo Logan.* Jan, 34
hydrometallurgy, evolution and milestones.* Feb, 118
installing cyclones at Cyprus Sierrita.* Sep, 1057
annual review.* May, 440
beneficiation of Canadian refractory magnesium minerals.* Mar, 234
bulk flotation at McLaughlin Mine.* Dec, 1343
electrowinning gold from copper-bearing cyanide.* Jun, 568
Freeport builds Indonesian copper smelter. Jun, 495
futuristic look at process control.* Jan, 43
hydrometallugy technical sessions wrapup.* Feb, 124
mill expansions at Freeport Indonesia.* Sep, 1051
mineral processing to material processing.* Dec, 1361
Newmont commercializes biooxidation process. Apr, 273
pressure oxidation startup at Getchell.* Feb, 115
recovery improvements at Aurora Mine.* Dec, 1333
Santa Fe Pacific proceeds with sulfide project. Nov, 1221
vacuum disk filter assists iron ore processing. Oct, 1161
variable speed SAG mills.* Nov, 1273
Mingo Logan, designing for process control* Jan, 34
*Mining equipment into the 21st century:** J. Wiebmer. Jun, 518
Mining Foundation of the Southwest, to induct four to hall of fame. Nov, 1218
*Mining geostatistics - Forty years passed. What lies ahead:** J-M. Rendu. Jun, 557.
Mining hall of fame:
begins museum upgrade. Feb, 110
eight mining leaders inducted.* Sep, 1070
Mining Law of 1872:
another compromise put forward. Jul, 598
conference committee to begin debate. Jan, 5
dies this year, but will be revived. Nov, 1212
heads list of public land issues. Feb, 96
House approves patent moratorium. Aug, 922
House conferees make counteroffer. Oct, 1126
Johnston offers middle ground proposal. Jun, 488
miners rally against new law. Jan, 15
why reform failed. Dec, 1316
Mining methods:
Bureau researches stope leaching. Nov, 1216
compact drill rig for narrow veins. Feb, 106
Great Salt Lake Minerals brines operations. Jan, 18
radio remote control at Cyprus Sierrita.* Jun, 503

Mining's image - what does the public really think?: N. Bingham. Mar, 200
Mining, annual review introduction.* May, 423
Minnesota, exploration review.* May, 414
Missouri, exploration review.* May, 415
Modeling:
animation models of mines to assist in planning.* Apr, 350
high tech tools help Barrick at Mercur. Jan, 24
Montana:
Canyon, PD seek Seven-Up Pete permits. Mar, 192
exploration review.* May, 415
Morales, L.C.: *Silica sand and industrial minerals in Mexico.* Apr, 311
Morgan, W.: *Optimizing truck-loader matching.* Oct, 1179
Morrison-Knudsen:
acquired one-third of German company. Jan, 22
acquires portion of German company. Feb, 110
MK Gold considers Nevada joint venture. Mar, 194
Morton Salt, mine completes two million manhours without lost time injury. Nov, 1228
Mourich, R.: *Using draglines to strip overburden in the Powder River Basin.* Aug, 963
MSHA:
announces Sentinels of Safety winners. Sep, 1042
single-shift coal sampling challenged. Aug, 922
Munoz, F.G.: *La Cienega: A new gold mine in Mexico.* Apr, 303
Murphy, J.E.: *Electrowinning of gold and silver from copper- bearing cyanide solutions.* Jun, 568

N

Namibia:
company prospecting for diamonds. Feb, 108
mineral potential.* Jan, 39
Natural iron oxide pigments - rebirth through innovation: S.S. Mauney. Jan, 70
NCA:
bituminous coal exports down. Jun, 498
challenges single-shift coal sampling. Aug, 922
coal production up in 1994. Mar, 187
merges with AMC. Nov, 1212
US coal production expected to rebound. Sep, 1036
Nehl, F.H.: *Electrowinning of gold and silver from copper- bearing cyanide solutions.* Jun, 568
Neil, D.M.: *Performance prediction: A key issue in mechanical hard rock mining.* Nov, 1263
Nepheline syenite, industrial minerals review.* Jun, 532
Neustal, K.L.: *Overburden-removal cost management using work order systems at Coteau Properties' Freedom Mine.* Dec, 1329
Nevada:
American Barrick company profile.* Nov, 1231
Atlas explores gold properties. Dec, 1324
engineering geology at Goldstrike.* Jan, 29
exploration review.* May, 416
Goldstrike sends company to top of producers.* Nov, 1232
Homestake studies Archimedes project. Dec, 1320
Meikle will add high-grade ore to Goldstrike.* Nov, 1237
mines produced record gold, silver. Jul, 617
pressure oxidation startup at Getchell.* Feb, 115
Royal Gold acquires 138 claims near Eureka. Apr, 282
Royal Gold begins production at Crescent. Oct, 1132
Royal Gold releases South Pipeline drilling results. Oct, 1133
Santa Fe Pacific proceeds with sulfide project. Nov, 1221
New developments in mining truck electronics: R.A. MacMillan. Jun, 513
New mining districts in Mexico: L. Lopez. Apr, 292
Newmont Gold:
approves Indonesian gold mine. Sep, 1040
awards contract for study of Indonesian property. Nov, 1218
shareholders sue to block assets combination. Mar, 194
to pay stockholders 6.5 cents a share for lawsuit. Jul, 634
Newmont Mining:
combines assets with gold unit. Jan, 16
commercializes biooxidation gold process. Apr, 273
gets financing for Zarafshan venture. May, 399
plans expansion at Minera Yanacocha. Apr, 281
Nickel:
Davy International to study Brazilian property. Apr, 284
Sherritt plans Cuban venture. Aug, 932
Sudbury operations improved.* Jul, 645
Tanzanian property drilled. Apr, 284
Nieto, A.: *Professional mining education available at Mexican universities.* Apr, 322
Nitrogen, industrial minerals review.* Jun, 538
North America sulfur market: Structure and outlook: N. Edmonson. Jun, 563
North Carolina, dedicates "Talking Rock Trail." Jun, 496
North Dakota, work order systems at Coteau.* Dec, 1329
Northwest Mining Association, some changes in mining are positive. Feb, 105
Norway, open to foreign mining investment. Jun, 494
Novak, T.: *Simulator for degasification, methane emission prediction and mine ventilation.* Apr, 341

O

O'Neil, T.:
Caterpillar introduces new hydraulic excavator and shovel. Oct, 1159
Drift of things. Apr, 262
Drift of things. Aug, 920
Drift of things. Feb, 94
Drift of things. Jan, 4
Drift of things. Jul, 596
Drift of things. Jun, 486
Drift of things. Mar, 176
Drift of things. May, 378
Drift of things. Nov, 1210
Drift of things. Oct, 1124
Drift of things. Sep, 1022
new technology for longwall ground control. Jul, 622
NSTA convention exhibit.* Feb, 132
president's interview.* Mar, 195
O'Neil, T.: *Cambior: Growth and diversification for a Canadian gold producer.* Nov, 1244
O'Neil, T.: *Interview with Robert C. Freas, 1994 SME President.* Mar, 195
O'Neil, T.: *Putting together a mining exhibit for Denver's NSTA convention.* Feb, 132
Ohio Valley Coal, discusses contract with utility. Sep, 1042
Olson, B.: *Bulk flotation of low-grade refractory ores at Homestake's McLaughlin Mine.* Dec, 1343
On-board electrical diagnostic system to improve the availability of continuous mining machines: J.L. Kohler. Aug, 987
Operations research, annual review.* May, 431
Optimizing truck-loader matching: D. Gove, W. Morgan. Oct, 1179
OSM, award winners announced. Aug, 933
Ouellet, H.: *Comparative testing of water-powered and pneumatic jackleg rock drills.* Aug, 999
Overburden-removal cost management using work order systemsat Coteau Properties' Freedom Mine: J.G. Pippenger, K.L. Neustal. Dec, 1329
Overview of titanium dioxide feedstocks: K.J. Stanaway. Dec, 1367
Ozdemir, L.: *Performance prediction: A key issue in mechanical hard rock mining.* Nov, 1263

P

Page, T.C.: *Geology and geochemistry of the Yarnell gold deposit.* Sep, 1061
Panama, geology of Santa Rosa gold deposits.* Apr, 346
Panek, L.A.: *Scaling mine pillar size and shape with the Psi function.* Nov, 1277
Paraszczak, J.: *Comparative testing of water-powered and pneumatic jackleg rock drills.* Aug, 999
Patton, S.B.: *Simulator for degasification, methane emission prediction and mine ventilation.* Apr, 341
Peabody:
adds to Australian coal holdings. Apr, 278
buys Exxon's Carter Mining. Oct, 1132
closes Illinois mine. Jul, 614
completes Carter acquisition. Nov, 1215
Marissa mine, Randolph plant resume operations. Apr, 280
signs coal supply agreement with Louisville Gas and Electric. Mar, 194
wins Kentucky conservation award. Oct, 1131
Pegasus Gold:
merges with El Condor. Apr, 275
proceeds with underground exploration at Diamond Hill. Jul, 632
Peng, S.S.: *Floor bolting for control of mine floor heave.* Sep, 1099
Peng, S.S.: *Roof bolting problems in weak roof.* Jul, 652
Pennsylvania, exploration review.* May, 417
Peralta, A.: *Professional mining education available at Mexican universities.* Apr, 322
Performance of dragline hoist and drag ropes: T.S. Golosinski. Nov, 1285
Performance prediction: A key issue in mechanical hard rock mining: J. Rostami, L. Ozdemir, D.M. Neil. Nov, 1263
Perry, G.A.: *Radio remote control mining at Cyprus Sierrita.* Jun, 503
Peru:
Magma wins bid for Tintaya project. Nov, 1222
Southern Peru gets loan for expansion. Apr, 282
Phelps Dodge:
begins Morenci expansion. Jul, 620
seeks Seven-Up Pete permits. Mar, 192
selects company for $200 million Morenci expansion. Oct, 1136
Philippines, 79 miners killed in underground explosion. Oct, 1136
Phosphate:
Freeport acquires Spanish business. Dec, 1323
industrial minerals review.* Jun, 539
recovery improvements.* Dec, 1333
Pipeline Systems, to design Chinese iron ore pipeline. Jan, 23
Pippenger, J.G.: *Overburden-removal cost management using work order systems at Coteau Properties' Freedom Mine.* Dec, 1329
Placer Dome:
outlines expanded gold output. May, 397
ready to proceed with Mt. Milligan project. Jan, 22
Planeta, S.: *Comparative testing of water-powered and pneumatic jackleg rock drills.* Aug, 999
Platinum:

BHP builds mine in Zimbabwe. Nov, 1227
BHP plans Zimbabwe project. Mar, 189
Pomroy, W.: *Recent improvements in the MFIRE ventilation and fire simulator.* * Feb, 145
Potash:
Great Salt Lake doubles brines production. Jan, 18
industrial minerals review.* Jun, 540
Powder River Basin:
economic, tax, royalty implications.* Aug, 947
environmental regulations.* Aug, 973
geology and geography.* Aug, 955
important to Wyoming's economy.* Aug, 943
markets for coal.* Aug, 951
Mother Lode of nation's compliance coal.* Aug, 939
overburden stripping with draglines.* Aug, 963
rail haulage challenges.* Aug, 965
safety practices and challenges.* Aug, 969
truck-shovel operations.* Aug, 960
Powder River Basin: Mother Lode of the nation's compliance coal: * A. Weakly. Aug, 939
Practical technique for determining the size distribution of blasted benches, waste dumps and heap leach pads: * J.M. Kemeny. Nov, 1281
Pradakar, A.: *Are big gains in coal loading possible? A look at some fundamentals.* * Jan, 65
Premoli, C.: *Mineral potential of Namibia.* * Jan, 39
Prime Resources, plans underground mine at Eskay Creek. Apr, 277
Principles of classification of reserves and resources in the CIS countries: * S.A. Diatchkov. Mar, 214
Process mineralogy, annual review.* May, 452
Professional mining education available at Mexican universities: * A. Peralta, A. Nieto. Apr, 322
Professional registration, professional engineering exam. May, 403
Pumice and pumicite, industrial minerals review.* Jun, 542
Putting together a mining exhibit for Denver's NSTA convention: * T. O'Neil, C. Haywood. Feb, 132

R

Radio remote control control mining at Cyprus Sierrita: * G.A. Perry. Jun, 503
Rail haulage challenges in the Powder River Basin: * D. Willis. Aug, 965
Railroads:
Burlington Northern, Sante Fe Pacific to merge. Aug, 936
haulage challenges in the Powder River Basin.* Aug, 965
Union Pacific to upgrade track. Oct, 1136
Ramey, D.S.: *In situ leaching wellfield design at San Manuel.* * Aug, 991
Rare earths, industrial minerals review.* Jun, 543
Recent improvements in the MFIRE ventilation and fire simulator: * L. Laage, H. Yang, R. Greur, W. Pomroy. Feb, 15
Reconstruction of the Port Inland limestone operation: * J.E. Brownhill. Oct, 1149
Recovery improvements extend reserves at Texasgulf's Aurora Mine: * H.M. Breza, J.N. Richardson. Dec, 1333
Regulations:
Clean Water Act reauthorization another threat to mining. Jun, 488
Corps of Engineers takes too long for wetlands applications. Apr, 264
cost of compliance for copper heap/dump leaching.* Sep, 1089
effects of NAFTA on mining in Mexico.* Apr, 320
how the Mexican Mining Law works.* Apr, 313
Mexican environmental laws.* Apr, 317
Research & development:
13 coal projects share $1 million. Sep, 1044
analytical solution for ground water inflow estimates.* Feb, 149
annual review.* May, 428
Bureau develops radial-axial splitter. Dec, 1319
Bureau testing vegetable oil as underground fuel. Mar, 176
Bureau urged not to close Denver center. Feb, 108
coal annual review.* May, 437
coal ash finding economical uses. Aug, 934
comparing water-powered and pneumatic jacklegs.* Aug, 999
determining the size distribution for blasted benches.* Nov, 1281
floor bolting to control floor heave.* Sep, 1099
improvements in the MFIRE fire, ventilation simulator.* Feb, 145
iron oxide pigments.* Jan, 70
location of methane monitors.* Feb, 141
mineral processing to material processing.* Dec, 1361
new technology for longwall ground control. Jul, 622
Newmont commercializes biooxidation process. Apr, 273
on-board electrical diagnostic systems for continuous miners.* Aug, 987
performance of dragline hoist and drag ropes.* Nov, 1285
process converts leonardite into char. Aug, 930
removing sulfur from kiln feed materials.* Feb, 153
roof bolting problems in weak roof.* Jul, 652
scaling mine pillar size and shape.* Nov, 1277
simulator for methane emission prediction.* Apr, 341
wellfield design at San Manuel.* Aug, 991
Rex, M.J.: *In situ leaching wellfield design at San Manuel.* * Aug, 991
Reynolds Metals, to sell Australian gold assets. Oct, 1135
Richards, D.M.: *In-pit crushing and conveying at Highland Valley Copper.* * Oct, 1186
Richardson, J.N.: *Recovery improvements extend reserves at Texasgulf's Aurora Mine.* * Dec, 1333
Rock bursts at Helca: A personal experience: * J. Dolph. Jul, 658
Roof bolting problems in weak roof: * S.S. Peng. Jul, 652
Rostami, J.: *Performance prediction: A key issue in mechanical hard rock mining.* * Nov, 1263
Rothfeld, L.B.: *Cost of compliance with potential future federal mine waste regulations for copper heap/dump leaching.* * Sep, 1089
Royal Gold:
acquires 138 claims near Eureka, NV. Apr, 282
begins gold production at Crescent. Oct, 1132
makes deal with Santa Fe Gold. Dec, 1326
releases South Pipeline drilling results. Oct, 1133
to explore Union Pacific lands. Jul, 632
Royal Minerals, to acquire Montana Reserves Corp. Apr, 282
Russell, R.L.: *Mill expansions at PT Freeport Indonesia.* * Sep, 1051
Russia:
Alaska is a base for mine projects. Jan, 19
Asarco to develop gold property. Oct, 1132
gold exchange to be ready by mid-year. Jan, 23

S

Safety practices and challenges in the Powder River Basin: * W.A. Holgate, J.K. Taylor. Aug, 969
Salt:
industrial minerals review.* Jun, 545
owners increase productivity. Aug, 920
Sanford, R.L.: *Simulator for degasification, methane emission prediction and mine ventilation.* * Apr, 341
Santa Fe Pacific Gold:
proceeds with Twin Creeks sulfide project. Nov, 1221
reports 26% increase in gold reserves. Mar, 189
spun off by parent. Aug, 931
Sante Fe Pacific:
merger planned with Burlington Northern. Aug, 936
spins off Sante Fe Pacific Gold. Aug, 931
Savage Resources, buys US zinc operation from Union Miniere. Apr, 283
Scaling mine pillar size and shape with the Psi function: * L.A. Panek. Nov, 1277
Schaidle, C.L.: *Earthmoving in the information age.* * Jun, 507
Sell, J.D.: *Geology and geochemistry of the Yarnell gold deposit.* * Sep, 1061
SGI International, to conduct feasibility study of Chinese coal property. Apr, 284
Sharon, R.P.: *Engineering geology of Barrick Goldstrike Mines' Betze pit.* * Jan, 29
Sherritt, plans Cuban nickel-cobalt venture. Aug, 932
Shuck, D.: *Bulk flotation of low-grade refractory ores at Homestake's McLaughlin Mine.* * Dec, 1343
Sikka, D.B.: *Economic potential of the Malanjkhand Proterozoic porphyry copper deposit, M.P. India.* * Mar, 221
Silica sand and industrial minerals in Mexico: * L.C. Morales. Apr, 311
Silica sand, Mexican industry.* Apr, 311
Silver, D.:
SME members express concerns at Keynote Session.* Apr, 330
some changes in mining are positive. Feb, 105
Silver:
Asarco, Coeur d'Alene form company. Nov, 1217
Coeur d'Alene begins building Fachinal Mine. Sep, 1043
electrowinning silver from copper-bearing cyanide.* Jun, 568
MIM buys portion of Cannington project. May, 402
Nevada mines produce record amounts. Jul, 617
Xerox technology needs no silver. Feb, 94
Simplified cost models for prefeasibility mineralevaluations: * T.W. Camm. Jun, 559
Simulator for degasification, methane emission prediction and mine ventilation: * S.B. Patton. Apr, 341
Siskind, D.E.: *Surface blasting near transmission lines.* * Dec, 1357
SME:
Annual Meeting wrapup.* Apr, 323
benefits from aggregates coloring book. Dec, 1325
Cogsnet a valuable service to members. Sep, 1047
downloading files on Cogsnet. Dec, 1349
Howell named executive director. Feb, 105
ISO meeting provides approach to ISO question. Aug, 935
life insurance credit announced. Sep, 1042
NSTA convention exhibit.* Feb, 132
Pittsburgh Section plans meeting with AusIMM. Sep, 1041
president's interview.* Mar, 195
Smith, D.B.: *Coal blending - meeting specifications.* * Oct, 1144
Smith, M.R.: *Engineering geology of Barrick Goldstrike Mines' Betze pit.* * Jan, 29
Smith, R.: *Bulk flotation of low-grade refractory ores at Homestake's McLaughlin Mine.* *

Dec, 1343
Soda ash, industrial minerals review.* Jun, 546
Sodium sulfate, industrial minerals review.* Jun, 547
Solution mining, wellfield design at San Manuel.* Aug, 991
*Some observations on turbulent depostition rates of coal dust in mine airways:** J.Li, R. Bhaskar. Jan, 59
Sottile, J.: *On-board electrical diagnostic system to improve the availability of continuous mining machines.** Aug, 987
South Africa, mining prospects. Aug, 920
South Dakota, exploration review.* May, 417
Southern Peru Copper, gets loan for plant expansion. Apr, 282
Spencer, D.D.: *Effects of NAFTA on mining in Mexico.** Apr, 320
Stagg, M.S.: *Surface blasting near transmission lines.** Dec, 1357
Stanaway, K.J.: *Overview of titanium dioxide feedstocks.** Dec, 1367
Stankus, J.C.: *Floor bolting for control of mine floor heave.** Sep, 1099
*Strategic ramifications of corporate environmental policy:** B.W. Cavender. Mar, 204
Strontium, industrial minerals review.* Jun, 547
Sturgul, J.R.: *Animation models of mines to assist in mine planning and production.** Apr, 350
Sulfur:
industrial minerals review.* Jun, 548
Main Pass reaches full capacity. Mar, 190
North American outlook and structure.* Jun, 563
Summitville:
added to EPA's Superfund priority list. Jul, 632
disaster not that bad. May, 398
pollution problems resolved. Jun, 486
Sunrise Stone, opens Wyoming's first stone plant. Sep, 1038
Superfund:
adds Summitville to priority list. Jul, 632
congress debates reauthorization. Aug, 922
*Surface blasting near transmission lines:** D.E. Siskind, M.E. Stagg. Dec, 1357
Surface mining:
annual review of equipment.* May, 426
annual review.* May, 428
automating surface mines.* Jun, 510
building Mexico's Guanacevi project.* Apr, 306
commissioning Asarco's Ray expansion.* Jul, 637
computers are the catalyst for information accessibility.* Jun, 516
computers in explosives industry.* Jun, 505
continuous surface mining equipment.* Nov, 1259
developments in truck electronics.* Jun, 513
earthmoving in the information age.* Jun, 507
environmental regulations in the Powder River Basin.* Aug, 973
markets for Powder River Basin coal.* Aug, 951
mining into the 21st century.* Jun, 518
overburden stripping in the Powder River Basin.* Aug, 963
Powder River Basin important to Wyoming's economy.* Aug, 943
Powder River Basin, Mother Lode of compliance coal.* Aug, 939
radio remote control mining.* Jun, 503
safety practices in the Powder River Basin.* Aug, 969
truck-shovel operations in the Powder River Basin.* Aug, 960
Sutton Resources, drills Kabanga and Kager nickel-cobalt
properties in Tanzania. Apr, 284
Sweden, open to foreign mining investment. Jun, 494

T

Tanzania, nickel-cobalt property drilled. Apr, 284
Taseko Mines, gains 100% of Fish Lake. Feb, 106
Taylor, J.K.: *Safety practices and challenges in the Powder River Basin.** Aug, 969
Technology news:
Argentine lithium brines. Jul, 660
Bureau develops radial-axial splitter. Dec, 1319
Continental Conveyor solves slippage problems. Mar, 218
guide to identifying international hydraulic couplings. Sep, 1074
high tech tools help Barrick at Mercur. Jan, 24
Rolla students design underground rock cutting machine. Oct, 1130
solving double-drum-hoist counterbalance problems. Jun, 4
vacuum disk filter retrofits assist iron ore processing. Oct, 1061
Wagner adds six-wheel-drive articulated truck. Jun, 501
Teck:
condition monitoring aids drive maintenance. Oct, 1134
gains Powderhorn titanium property. Dec, 1326
Telsmith, sold crusher to American Barrick. Nov, 1228
*Tennesse zinc - A status report:** R.C. Freas. Oct, 1152
Teryl Resources, release assay results from Alaskan property. Jan, 22
Texasgulf, recovery improvements at Aurora Mine.* Dec, 1333
Thimons, E.D.: *Determination of optimal longwall face methane monitoring locations.** Feb, 141
Thompson Creek Metals, reopening Thompson Creek moly mine. Apr, 282
Tilton, J.E.: *Environmental revolution: Stage two.** Jul, 650
Titanium:
industrial minerals review.* Jun, 549
overview of dioxide feedstocks.* Dec, 1367
Teck acquires Powderhorn property. Dec, 1326
Tomlingson, P.D.: *Downsizing maintenance to improve performance: Defining the downsizing task.** Sep, 1065
Tomlingson, P.D.: *Effective maintenance downsizing techniques: The starting point.** Oct, 1156
Trona, record Wyoming production predicted. Nov, 1210
*Truck-shovel operations in the southern Powder River Basin:** R. Church, K. Kost. Aug, 960
Turkey, Cominco makes discovery. Dec, 1321

U

*Underground hard rock mechanical mining:**R.L. Bullock. Nov, 1254
Underground mining:
annual review of equipment.* May, 427
BHP builds platinum mine in Zimbabwe. Nov, 1227
Bismark, a large Mexican zinc mine.* Apr, 295
Bureau researches stope leaching. Nov, 1216
compact drill rig for narrow veins. Feb, 106
comparing water-powered and pneumatic jacklegs.* Aug, 999
floor bolting to control heave.* Sep, 1099
hard rock mechanical mining.* Nov, 1254
Homestake plans operation at Eskay Creek. Apr, 277
improvements in the MFIRE fire, ventilation simulator.* Feb, 145
La Cienega, a new Mexican gold mine.* Apr, 303
location of methane monitors.* Feb, 141
Meikle will add high-grade ore to Goldstrike.* Nov, 1237
rock bursts at Hecla.* Jul, 658
roof bolting problems in weak roof.* Jul, 652
scaling mine pillar size and shape.* Nov, 1277
Shoal Creek coal mine opens. Sep, 1035
students design rock cutting machine. Oct, 1130
Union Miniere, sold US zinc operation to Savage Resources. Apr, 283
Union Pacific:
buys oil and gas unit from Cyprus Amax. Apr, 277
Royal Gold to explore lands. Jul, 632
to spend $32.5 million on track upgrades. Oct, 1136
United Auto Workers, ends strike against Caterpillar. Jan, 22
Uranium, Uzbekistan makes deal with US. Dec, 1323
US government:
Bureau of Mines
AMC asks that cuts be reconsidered. Apr, 262
budget cut by $19.7 million. Mar, 190
develops radial-axial splitter. Dec, 1319
faces 10% budget cut for 1995. Sep, 1024
four interviewed for director. Apr, 262
new technology for longwall ground control. Jul, 622
peat moss and polymer beads help clean metals from water. Oct, 1124
redirection of focus proposed. Feb, 96
researches stope leaching. Nov, 1216
Rhea Graham named director. Oct, 1126
testing vegetable oil as underground fuel. Mar, 176
threatened with budget cuts. Feb, 94
urges not to close Denver center. Feb, 108

EPA
congress debates Superfund. Aug, 922

Interior department
Babbitt to establish National Biological Survey. Jan, 5

MSHA
single-shift coal sampling challenged. Aug, 922

OSM
award winners announced. Aug, 933
*US share of world mineral markets: Where are we headed?:** G. Davis. Sep, 1067
*Use of an analytical solution for preliminary estimates of ground water inflow to a pit:** T.M. Hanna, E.A. Azrag, L.C. Atkinson. Feb, 149
*Using draglines to strip overburden in the Powder River Basin:** R. Mourich. Aug, 963
USMX:
Dewey Dome is promising. Feb, 106
finds more gold at Noche Buena. Apr, 283
to evaluate and develop Illinois Creek gold property. Oct, 1136
Utah:
Centurion acquires more Tintic property. Oct, 1133
Centurion buys private mining claims. Jul, 633
exploration review.* May, 417
Great Salt Lake Minerals doubles brines production. Jan, 18
Uzbekistan:
makes uranium deal with US. Dec, 1323
Newmont begins gold project. Jan, 21
Newmont gets financing for Zarafshan venture. May, 399

V

Vaninetti, G.E.: *Markets for southern Powder River Basin coal.** Aug, 951
Variable speed SAG mills: Motor capability vs.

*mill capability:** D.J. Barratt. Nove, 1273
Venezuela:
company to double iron ore capacity. Apr, 283
iron ore producer to double capacity. May, 397
Ventilation:
annual review.* May, 436
improvements in the MFIRE simulator.* Feb, 145
location of methane monitors.* Feb, 141
simulator for methane emission prediction.* Apr, 341
Virginia, exploration review.* May, 420
*Vocational and technical education in geoscience withemphasis on geochemical exploration skills:** J.A. Madonna. Feb, 128
Voest-Alpine, to market Corex technology. Jan, 22

W

Walters, L.A.: *Electrowinning of gold and silver from copper-bearing cyanide solutions.** Jun, 568
Ward, M., speaks at SME Annual Meeting.* Apr, 323
Washington:
Hecla closing Republic unit. Dec, 1327
Hecla closing Republic unit. Dec, 1327
Weakly, A.: *Powder River Basin: Mother Lode of the nation's compliance coal.** Aug, 939
Western Mining, combines alumina operations with Alcoa. Aug, 929
Westmoreland Coal:
closing Hampton mine, prep plant. Apr, 282
sells Criterion Mine to Consolidation Coal. Oct, 1136
Weston Minerals, new consulting company formed. Apr, 282
Wetlands, Corps of Engineers takes too long. Apr, 264
*What it's worth: A review of mineral royalty information:** H.L. Bourne. Jul, 641
*What to make of gold:** J.M. Christian. Dec, 1346
White, D.C.: *Geology and mineralization of the Santa Rosa gold deposits, Panama.** Apr, 346
White, J.W.: *Automating surface mines.** Jun, 510
White, L.:
American Barrick, company profile.* Nov, 1231
how the Mexican Mining Law works.* Apr, 313
White, L.: *Barrick poised for future growth.** Nov, 1233
White, L.: *Major Inco project improves Sudbury operations.** Jul, 645
White.L.: *How the Mexican Mining Law works.** Apr, 313
Wiebmer, J.: Mining into the 21st century.* Jun, 518
Wiley, K.L.: *In situ leaching wellfield design at San Manuel.** Aug, 991
Willis, D.: *Rail haulage challenges in the Powder River Basin.** Aug, 965
Worrall, C.: *Markets for southern Powder River Basin coal.** Aug, 951
*Wyoming Powder River Basin coal: Economic, tax and royalty implications:** W.M. Hartzler. Aug, 947
*Wyoming's Powder River Basin - geology and geography of the nation's largest coal field:** G.B. Glass. Aug, 955
Wyoming:
coal important to economy.* Aug, 943
environmental regulations in the Powder River Basin.* Aug, 973
exploration review.* May, 421
markets for Powder River Basin coal.* Aug, 951
overburden stripping in the Powder River Basin.* Aug, 963
Powder River Basin economic, tax, royalty implications.* Aug, 947
Powder River Basin's geology, geography.* Aug, 955
Powder River Basin, Mother Lode of compliance coal.* Aug, 939
rail haulage challenges in Powder River Basin.* Aug, 965
record trona production expected. Nov, 1210
safety practices in the Powder River Basin.* Aug, 969
Sunrise Stone opens state's first plant. Sep, 1038
truck-shovel operations in the Powder River Basin.* Aug, 960

Y

Yang, H.: *Recent improvement in the MFIRE ventilation and fire simulator.** Feb, 145
Ynchausti, R.A.: *Futuristic look at process control in the minerals industry.** Jan, 43
Yuan, S.: *Matching longwall and continuous miner productivity requirements.** Aug, 995

Z

Zeolites, industrial minerals review.* Jul, 662
Zimbabwe:
BHP builds platinum mine. Nov, 1227
BHP plans platinum project. Mar, 189
Zimmer, J.A.: *Determination of optimal longwall face methane monitoring locations.** Feb, 141
Zinc:
Asarco sells Hillsburo plant to US Zinc. Apr, 282
Bismark: Mexico's new major mine.* Apr, 295
CIM overview. Jul, 613
CRA completes impact assessment for Century mine. Jul, 633
Irish mine gets approval. Jun, 494
Tennessee status report.* Oct, 1152
Union Miniere sells US zinc operation to Savage Resources. Apr, 283
Zoschke, L.T.: *Automating surface mines.** Jun, 510

Part 2: SME News

A

Abel, John F., Feb 112
Accreditation Board for Engineering and Technology (ABET), Announces meeting, Sep 1079
Alexander, Danrick W., Jul 606
Alsobrook, A. Frank, Jul 607
American Association of Engineering Societies (AAES) offers new quarterly, Dec 1380
American Institute for Mining, Metallurgical and Petroleum Engineers (AIME), Awards, Mar 185
Ampian, Sarkis G., Jul 606
Arnold, Barbara J., Jul 607
Arnold, James R., Jul 610
Ary, T.S., Feb 111
Ashworth, Eileen, Jul 605
Association for Women Geoscientists offers Chrysalis Scholarship, Feb 160
Association of Exploration Geochemists student paper competition, Oct 1167
Awards
Coal Division Distinguished Service, Feb 113
Coal Division Stefanko Best Paper, Feb 158
Dickerson, Ben F., Feb 111
Eavenson, Howard N., Feb 111
Environmental Conservation Distinguished Service, Mar 185
Gaudin, Antoine M., Feb 111
GEM, Feb 158
Hardinge, Hal Williams, Mar 185
Industrial Minerals Division Young Scientist Award, Feb 158
Jackling, Daniel C., Feb 111
Mineral Processing Division Outstanding Young Engineer, Feb 113
Mining and Exploration Division Distinguished Service, Feb 113
Nicholls, Percy W., Mar 245
Peele, Robert, Feb 112
President's Citation, Feb 158
Ramsay, Erskine, Mar 185
Richards, Robert H., Mar 185
Rock Mechanics, Feb 112
Saunders, William L., Mar 185
Taggart, Arthur F., Feb 112
Wadsworth, Milton E., Feb 113
Woomer, J.W., Feb 113

B

Bandopadhyay, Sukumar, Jul 607
Barrera, Alfonso Lopez celebrates 100th birthday, Aug 980
Bise, Christopher J., Jul 605
Book Catalog, Oct 1165
Burst, John F., Jul 605

C

Call for Papers
Underground Operators Conference, Oct 1167
20th International Technical Conference on Coal Utilization and Fuels Systems, Jul 665
35th US Symposium on Rock Mechanics, Aug 933
4th Symposium on Respirable Dust in the Mineral Industries, Mar 184
7th US Mine Ventilation Symposium, May 460
Acid Rain & Electric Utilities Conference, May 465
Computer Applications in the Mineral Industry, Aug 921
Fourteenth Conference on Ground Control in Mining, Nov 1291
International Symposium on the Treatment and Minimization of Heavy Metal-Containing Wastes, May 461
Rapid Excavation and Tunneling Conference 1995, Feb 98, Mar 179
Sixth National and International Congress of Metallurgical Engineering and Materials, Nov 1291
Surface Mining and the Environment, Sep 1037
Third International Symposium on Mine Mechanization and Automation, Jun 576, Jul 665
XXV Apcom, Feb 160
Coal Division
Awards scholarships, Aug 980, Sep 1081, Dec 1382
Coal Division Views, Aug 979, Sep 1081
Woomer award nominations sought, Apr

335
Colorado School of Mines,
Foreign exchange program, Mar 245
Offers new economics degree, May 462
Olin Lectureship series, Oct 1165

Coming Events/Short Courses
Jan 75, Mar 219, May 457, Aug 981, Oct 1163, Dec 1355

D

Dahl, Charles L., Feb 113
Dempsey, Stanley, Aug 977
Dowling, Edward C. Jr., Jul 610

E

Ehrlinger, Henry P. III, Feb 112
Empire Mine State Historic Park, Oct 1167
Employment Service
Jan 78, Feb 161, Mar 246, Apr 360, May 470, June 581, July 679, Aug 1007, Sept 1109, Oct 1194, Nov 1297, Dec 1387
Engineering Foundation awards grant, Jan 53

F

Filas, Barbara, Jul 606
Frantz, Robert L., Feb 158, Mar 185
Free Literature
Jan 49, Mar 241, July 668, Sept 1084, Nov 1268

G

GEM
Awards, Feb 158
GEM Facts, Jan 9, Feb 99, Mar 181, Apr 267, May 380, June 491, July 602, Aug 925, Dec 1314
Photo Contest, Jan 12
Guarnera, Bernard J., Jul 608

H

Han, Kenneth N., Jul 610
Hartzog, Laurence D., Jul 606
Heivilin, Fred G., Jul 608
Hiskey, J. Brent, Feb 112
Hogg, Richard, Feb 111
Hollop, Edward E., Jul 607
Howell, Gary D., Feb 95, Feb 105

I

Industrial Minerals Division (IndMD)
Awards scholarship, Aug 980, Nov 1289
In the Aggregate, Feb 159, May 464, Apr 337, Jun 575, Dec 1381
Young Scientist award nominations sought, Apr 335
Iverson, Paul, Feb 158

J

Job Bank, May 386

K

Karmis, Michael, Jul 608
Karr, Charles L., Feb 113
Kawatra, S. Komar, Feb 112, Jul 610
Kayler, Kyle L., Jul 608
Khair, A. Wahab, Jul 6-7
Kissell, Fred N., Feb 111

L

Letters
Jan 8, Feb 95, Apr 266, June 490, Sept 1031, Nov 1213
Li, Ta M., Jul 605
Literature Review
Feb 97, May 487, Oct 1125
Local Sections
Central Appalachian 1994 spring meeting, May 461
Colorado MPD subsection meets, Apr 338
Colorado wins GEM award, Feb 158
Minnesota holds meeting, exhibit, Dec 1317, 1383
Nevada offers 1995 calendar, Nov 1289
Pittsburgh holds joint meeting with, PCMIA and Aus IMM, Aug 1079
Pittsburgh holds photo contest, Feb 157
Southern Nevada participates in Earth Fair, Jun 573
Wyoming awards Coates scholarship, Mar 243

M

Marine Minerals Technology Center student paper contest, Mar 245
Matetic, Rudy J., Feb 113
Meetings
Coal and the Environment, Fifth Western Regional Conference on Precious Metals, Sep 1042
8th European Symposium on Comminution, Mar 245
Accreditation Board for Engineering and Technology, Sep 1079
APCOM 1993 presents awards, Jan 52
Arizona Conference 1994, Jan 51, Feb 157, Mar 243, Apr 335, May 461, Jun 573, Jul 663, Aug 977, Sep 1079, Oct 1165, Nov 1289, Dec 1379
Bootprints Along the Cordillera, Jan 22, May 402, Aug 932
Canadian Institute of Mining, Metallurgy and Petroleum, 1994 Annual, Jan 53, Annual Hydrometallurgical Meeting, May 465
Eleventh Annual International Pittsburgh Coal Conference, Jul 665
Environmental Issues and Opportunities, Aug 919
European Metals Conference, Apr 270
Fourth International Symposium on Mine Planning & Equipment Selection, Jul 609
International Land Reclamation and Mine Drainage Conference, Mar 245
International Precious Metals Institute 18th Annual Technical Conference, May 465
International Symposium on Leaching Principles and Practice, Dec 1382
Investing in the Americas 1994, Mar 186
ISO 9000, Jan 51. Feb 157, Mar 243, Apr 335, May 461, Jun 573, Jul 663, Aug 977, Sep 1079, Oct 1165
Mineral Economics and Management Society, Nov 1291
Northwest Mining Association 100th Annual Convention, Sep 1038
Offshore Technology Conference 1994, Feb 91, Apr 290
Pittsburgh Coal Mining Institute, Pittsburgh Section of SME and Australasian Institute of Mining and Metallurgy joint meeting, Sep 1079
Processing for Profit, Sep 1033
Rapid Excavation and Tunneling Conference, June 573, July 663, Aug 977, Sep 1079, Oct 1165, Nov 1289, Dec 1289
Rocky Mountain Coal Mining Institute 90th Convention and Annual Meeting, May 461
SME 1994 Annual, Jan 51, Feb 157
SME 1994 Annual Preshow report, Jan 58a
SME 1995 Annual, Mar 243, Apr 335, May 461, June 573, July 663, Aug 977, Sep 1079, Oct 1165, Oct 1137, Nov 1289, Dec 1289
Society of Economic Geologists,Society of Geology Applied to Mineral Deposits and the Association of Exploration Geochemists Conference, Jul 665
Technological Solutions for Pollution Prevention in the Mining and Mineral Processing Industries, Dec 1382
Third International Conference on Environmental Issues and Waste Management in Energy and Mineral Production, May 385
Third International Conference on the Abatement of Mine Drainage, Mar 245
Underwater Mining Institute 25th Annual Meeting, Oct 1167
VII Mineral Processing Meeting, Jun 576
XIX International Mineral Processing Congress, Jan 51, Feb 157, Mar 243, Apr 335, May 461, Jun 573, Jul 663, Aug 977, Sep 1079, Oct 1165, Nov 1289, Dec 1289
Mellon, Jackie S., Jul 606
Membership
Jan 79, Mar 247, Apr 361, May 471, June 582, July 679, Aug 1007, Sept 1110, Oct 1195, Nov 1297
Mineral and Metallurgical Processing Division (MPD)
Awards scholarships, Jun 573, 576, Aug 980
Fine Grind, Sep 1080
Gaudin award nominations sought, Mar 243
Young Engineer award nominations sought, Apr 335
Mineral Economics and Management Society meeting, Nov 1291
Mining and Exploration Division (M&E)
Awards scholarships, Oct 1165
Rock in the Box, May 463, Jun 577
Mining and Metallurgical Society of America
Announces student paper contest, Feb 160
Awards student essay prize, Feb 160

N

National Mining Hall of Fame and Museum opens art gallery, Jun 576, Aug 980
National Mining Hall of Fame, Aug 977
National Research Council associateships, Jan 52
Necrology
Jan 52, Mar 244, Apr 336, May 462, June 574, July 664, Aug 978, Sept 1082, Oct 1166, Nov 1291, Dec 1380
New Books
Feb 135, Mar 242, Apr 357, June 578, July 676, Aug 1004, Sept 1106, Oct 1171, Nov 1269, Dec 1378
New Mexico Tech receives gift, Mar 244
New Products
Jan 54, Feb 137, Mar 239, Apr 332, May 455, June 551, July 671, Aug 983, Sept 1085, Oct 1169, Nov 1269, Dec 1375
Norman, James C., Jul 608

O

Obituaries
Bates, Robert L., Oct 1166
Bernick, Robert W., May 462
Blake, Robert A., Sep 1082
Coleman, Ernest E., Aug 978
Core, Jesse F., Apr 336
Flavel, Malcolm, D., Jun 574
Franz, John C., May 462
Guild, Philip W., Apr 336

Havard, John F., Jul 664
Jones, Jack Q., Mar 244
Kirkemo, Harold, Mar 244
Lerch, Glen B., Sep 1082
Mackey, Thomas S., Jul 664
Mulchay, Roland, Jun 574
Richard, Kenyon E., Jan 52
Stuart, Herbert Z., May 462

P

Personal News
Jan 77, Feb 114, Apr 359, May 464, June 580, July 678, Aug 1006, Oct 1193, Nov 1296, Dec 1386
Philip, T. Peter, Mar 185
Piniazkiewicz, R.J., Feb 158
Preprint list, Apr 287
President's Page
Jan 7, Feb 95, Mar 177, Apr 263, May 379, June 489, July 600, Aug 923, Sept 1026, Oct 1127, Nov 1211, Dec 1313
Presley, Gordon C., Jul 608
Professional Registration
Exam, May 403, June 490
Short Courses, June 573

Q

Queneau medal nominations sought, Sep 1079
Quenon, Robert H., Jan 53

R

Ramani, Raja V., Feb 113, Feb 158
Ranta, Donald E., Feb 158, Jul 608
Rapp, John S., Jul 606
Rendu, Jean-Michael, Feb 111

S

Samples, R. Eugene, Mar 185
Scheiner, Bernard J., Mar 184
Scholarships
Berryman, David, MPD, Aug 980
Childs, Aaron, MPD, Jun 576
Cook, Paul R., MPD, Aug 980
Dyer, Thomas, IndMD, Aug 980
Hairhoger, Thomas, Dec 1382
Holm, Michael E., MPD, Aug 980
Hosler, Gregory A., M&E, Oct 1165
Hustus, Jason, Coal, Sep 1081
Kells, John, M&E, Oct 1165
Kline, Daniel S., Coal, Sep 1081
Koch, Barry, Coal, Sep 1081
Mader, Elizabeth, Coal, Sep 1081
Nelson, Corey, Coal, Aug 980
Olmstead, Leslie, IndMD, Nov 1289
Place, Daphne, Coal, Sep 1081
Reasoner, John, MPD, Jun 573
Reid, Robert J., Coal, Sep 1081
Shriver, James A. II, MPD, Aug 980
Wright, Douglas, AIME, Nov 1291
Zimmerman, Jerry A., M&E, Oct 1165
Schweizer, Arthur A., Jul 606
Shepard, William M., Feb 158
Short Courses
Economic Guidelines for Mineral Exploration, Nov 1291
Drilling and Blasting techniques, Nov 1291
Introduction to Mine and Quarry Valuation Workshop, Oct 1167
Mineral Processing Plant Simulation and Optimization, May 456
PE Exam, Mackay School of Mines, Jun 573,
The Pennsylvania State University, Jun 573,
West Virginia University, Jun 573
Singh, Madan M., Jul 605
SME Foundation
Feb 102, May 382
SME News
Jan 51, Feb 157, Mar 243, Apr 335, May 461, June 573, July 663, Aug 977, Sept 1079, Oct 1165, Nov 1289, Dec 1379
Society for Mining, Metallurgy, and Exploration, Inc. (SME)
1994 Annual Meeting report, Apr 323
25-year members, Dec 1379
America Online, Feb 91
Awards, Feb 111
Board of Directors Albuquerque Meeting, Jan 51
Distinguished Member Award, Sep 1078
Distinguished Members, Feb 112
Holiday schedule, Dec 1380
International Sponsorship Program, May 384, Aug 928
Legion of Honor, Feb 158, Dec 1379
Membership Directory 1994, Jul 661
Nominations, Jul 605
Outstanding Student Chapter Contest, Jul 663, Aug 924, Sep 1084
Outstanding Student Paper Contest, Jul 663, Aug 924, Sep 1084
Presidents Report 1993, May 389
Sottile, Joseph Jr., Jan 53
Southern Illinois University wins reclamation grant, Nov 1291
Student Chapters
CSM plans student activities during SME annual meeting, Nov 1289
Delft chapter begins activities, Dec 1383
Outstanding Chapter Award winner, Feb 157
Outstanding Chapter contest, Jul 663, Aug 924, Sep 1084
Outstanding Paper Award winner, Feb 157
Outstanding Paper contest, Jul 663, Aug 924, Sep 1084
Suboleski, Stanley, Feb 158
Summers, David A., Feb 112

T

Trivedi, Nikhil C., Jul 606

U

Underground Technology Research Council meeting, Apr 338, Jul 663
University of Idaho offers software program, Dec 1383
University of Missouri-Rolla establishes Quenon chair, Jan 53

W

Wadsworth, Milton E., Feb 113
Washington Survey
Jan 5, Feb 96, Apr 264, June 488, July 598, Aug 922, Oct 1126, Nov 1212, Dec 1316
Western Mining Museum book collection, Nov 1291
Wheeler, Dennis E., Mar 185
Wicken, Oscar M., Mar 185
Wilkinson, William H., Jul 606
Women's Auxiliary to AIME (WAAIME)
Annual meeting 1994, Jan 53
Awards scholarship loans, Aug 977
Annual Meeting 1995, Dec 1383

Y

Yingling, Jon C., Feb 112